Title: Preferably Pb-free and As-free optical glasses with Tg ≤ 500°C

Claims

1. Optical glass having a refractive index n_d of $1.48 \leq n_d \leq 1.56$, an Abbe number ν_d of $64 \leq \nu_d \leq 72$ and a transformation temperature Tg ≤ 500°C, which comprises the following composition (in % by weight):

SiO_2	53	-	58
B_2O_3	11	-	15
Al_2O_3	16	-	20
Na_2O	0	-	13
K_2O	0	-	13
ΣM_2O	9	-	13
F	0.5	-	4

2. Optical glass according to Claim 1, which comprises the following composition (in % by weight):

SiO_2	53	-	58
B_2O_3	11	-	15
Al_2O_3	16	-	20
Na_2O	9	-	13
F	0.5	-	4

3. Optical glass according to Claim 1 or 2, which comprises the following composition (in % by weight):

SiO_2	53	-	56
B_2O_3	11	-	15
Al_2O_3	16	-	18
Na_2O	11	-	13
F	0.5	-	4

4. Optical glass according to one of the preceding claims, which as refining agents contains the following components (in % by weight):

Sb_2O_3	0	-	1	and/or
SnO	0	-	1	and/or
NaCl	0	-	1	and/or
SO_4^{2-}	0	-	1	

5. Use of a glass according to one of Claims 1 to 4 for an optical element in the application areas of imaging, projection, telecommunications, optical communication technology and/or laser technology.